

03/10/18

Shire of Augusta Margaret River PO Box 61 Margaret River 6285

Attention: Grant Gordon-Kirby

RE: Recommended works Foreshore Reserve, Augusta WA 6290.

As per the request, the trees located in the foreshore reserve of Turner Caravan Park were visually inspected for any major features or defects regarding the safety of people and property. The trees on site are almost exclusively mature and post-mature Agonis flexuosa (WA peppermint trees). There are a number of juvenile trees of varying species located within the foreshore reserve and the gardens along the water's edge. There is also one quite large mature Eucalyptus diversicolor (Karri).

Most of the semi to post mature peppermint trees are showing features typical of this species occurring close to prevailing winds. Most trees show a windswept form with some evidence of decay. Some of the trees have been heavily pruned and as a result have a less windswept form. Most of the trees are located in high target areas with footpaths, playground equipment, exercise equipment and camping sites underneath some of the trees canopies.

There are several trees that have quite extensive decay and the stability of these trees is questionable. Most of the trees are showing a fair to good vitality but the structure of the trees is rated as poor to fair. There is evidence of mechanical damage around the base of a lot of trees likely cause by turf maintenance works. This has led to some trees to having quite poor anchorage and evidence of basal decay. Decay is also evident on many of the old pruning cuts and previous failure wounds.

The Majority of the Peppermint Trees on site would benefit from some form of canopy works. The removal of cracked, broken and or hanging branches as well as the removal of hazardous deadwood would reduce risk to people or property. Reduction of some of the overextended windswept lateral branches may also reduce the likelihood of these limbs failing. Weight reductions on heavily decayed limbs in combination with a tree cable system will likely reduce the potential of those limbs failing.

The trees where anchorage and or basal stability may be an issue should be propped or removed entirely. Pruning of some of these trees will not address the basal stability and therefore removal or propping is advised. Props should be engineered by an adequately trained professional.

The phototropic and windswept form of some of the trees allow for the possibility of children to climb them. Some of these trees would benefit from the added stability of props. Where props are not an option reducing the canopies wind sail and overall weight could benefit the safety of these trees.

Some of the Peppermint trees have specific canopy works that are noted on the attached spreadsheet. It is suggested that the majority of the large Peppermint trees be thoroughly inspected and whilst the arborist is in the tree any required preventative works be performed. The use of tree cables, tree props, understory planting and other non-invasive techniques should be considered as some of these trees are post mature and may pose some historical significance. Also, as trees are removed it is preferable to have some juvenile trees planted in their place.

The juvenile trees on site do not pose any significant risk to people or property and do not require any works regarding safety. However, formative pruning of these trees is recommended within the next 2 years as any defects could be rectified and the trees will likely respond to the pruning positively.

The single Karri tree has a high target area underneath its canopy and is the largest of the trees on this site. The tree has likely had multiple failures over its lifetime that contributed to the form of the tree. There are a number of large extended laterals on this tree that should be reduced. A selective reduction of parts of the upper canopy is also recommended. Installation of tree cables on any suspect limbs during the canopy works is also recommended.

It is recommended that all trees receive aerial pruning works including the removal of dead, damaged or diseased limbs and any suspect lateral limbs to be reduced in wind sail and or weight to a suitable growth point.

Additional works are required on 16 trees.

The following table contains specific canopy works for the 16 trees and photographs of these trees are included in this report.

Once these works have been conducted I recommend the trees be reinspected every 2 years in order to determine whether any further works are necessary to reduce risk to people and property.

These works should be carried out by suitably qualified and experienced arboricultural contractors and in compliance with Australian Standard AS:4373 (2007); Pruning of Amenity Trees. The contractors should be advised to report on any defects that may not be visible from a ground-based inspection in order that these may be addressed.

Kind regards, Mitchell Keetley

Prepared by: Mitchell Keetley Graduate Certificate in Arboriculture

PO Box 5227, West Busselton WA 6280

PH: 08 9755 4361

E: info@arborguy.com.au



Figure 1: Site location with specific works trees numbered and general locations circled in red.



Figure 2: Tree 1.



Figure 3: Tree 2.



Figure 4: Tree 3.



Figure 5: Tree 4.



Figure 6: Tree 5.



Figure 7: Tree 6.



Figure 8: Tree 7.



Figure 9: Tree 8.



Figure 10: Tree 9.



Figure 11: Tree 10.



Figure 12: Tree 11.



Figure 13: Tree 12.



Figure 14: Tree 13.



Figure 15: Tree 14. This is a stand of approximately 10 stems.



Figure 16: Tree 15.



Figure 17: Tree 16.



Tree Number	Tree I.D	Recommended Works
	1 Eucalyptus diversicolor	Weight reduction of extended laterals. Crown reduction of Extended upright limbs. Removal of deadwood. Cable instalation if required or benifical.
	- Lucurypeus arversicoior	Weight reduction of extended laterals. Grown reduction of extended aphight limbs. Nemoval of dedawood, cable installation in required of behindul.
	2 Agonis flexuosa	Tree Removal.
	3 Agonis flexuosa	Heavy Crown Reduction to suitable growth points
	4 Agonis flexuosa	Weight reduction of extended laterals. Crown reduction of Extended upright limbs. Removal of deadwood. Cable instalation if required or benifical.
	5 Agonis flexuosa	Heavy Crown Reduction to suitable growth points
	3 rigoriis frexuosu	Treaty crown neutron to suitable growth points.
	6 Agonis flexuosa	Crown reduction. Reduction and or removal of laterals extending over footpath.
	7 Agonis flexuosa	Tree Removal.
	8 Agonis flexuosa	Weight reduction over picnic bench.
	9 Agonis flexuosa	Tree Removal. Tree could potentialy be retained if suitable tree prop is engineered.
	3 Agoriis Jiexuosu	Tree Kemovai. Tree codia potentialy de retainea il sultable tree prop is engineerea.
	10 Agonis flexuosa	Weight reduction of extended laterals. Crown reduction of Extended upright limbs. Removal of deadwood. Cable instalation.
	11 Agonis flexuosa	Heavy Crown Reduction to suitable growth points
	12 Agonis flexuosa	Heavy Reduction of eastern limbs to suitable growth points. Remove limbs if no suitible growth points.
		· · · · · · · · · · · · · · · · · · ·
	13 Agonis flexuosa	Tree Removal.
	13 Agoriis Jiekuosu	Hee Kelloval.
	14 Agonis flexuosa	Remove stem over footpath.



Tree Number	Tree I.D	Recommended Works
15	Agonis flexuosa	Remove stem over footpath.
16	Agonis flexuosa	Tree Removal.